

THAT WHICH IS CLAIMED:

1. A communications cable comprising:
a cable jacket;
a spacer extending within the cable jacket, the spacer having a longitudinally extending center portion and plurality of longitudinally extending wall portions radiating from the center portion, the longitudinally extending wall portions increasing in thickness from the center portion to the cable jacket, the spacer and the cable jacket defining a plurality of compartments within the cable jacket;
a shield extending between the spacer and the cable jacket; and
a twisted pair of insulated conductors disposed in one of the plurality of compartments.
2. The communications cable according to Claim 1 further comprising a plurality of twisted pairs of insulated conductors disposed in respective ones of the plurality of compartments.
3. The communications cable according to Claim 2 wherein each of the plurality of twisted pairs of insulated conductors has a different lay length.
4. The communications cable according to Claim 2 wherein the plurality of longitudinally extending wall portions are configured so as to define a plurality of compartments of a helical configuration within the cable jacket and the plurality of twisted pairs of insulated conductors located within the plurality of compartments extend helically about the longitudinal axis of the cable.

- ~~1.~~ 5. A communications cable comprising:
a cable jacket;
a spacer extending within the cable jacket, the spacer having a longitudinally extending center portion and plurality of longitudinally extending wall portions radiating from the center portion, the longitudinally extending wall portions increasing in thickness over only a portion thereof from the center portion to the cable jacket, the spacer and the cable jacket defining a plurality of compartments within the cable jacket; and

10 a twisted pair of insulated conductors disposed in one of the plurality of compartments.

2. ~~6~~. The communications cable according to Claim ¹/~~6~~ further comprising a plurality of twisted pairs of insulated conductors disposed in respective ones of the plurality of compartments.

3. ~~7~~. The communications cable according to Claim ²/~~6~~ wherein each of the plurality of twisted pairs of insulated conductors has a different lay length.

4. ~~8~~. The communications cable according to Claim ³/~~6~~ wherein the plurality of longitudinally extending wall portions are configured so as to define a plurality of compartments of a helical configuration within the cable jacket and the plurality of twisted pairs of insulated conductors located within the plurality of
5 compartments extend helically about the longitudinal axis of the cable.

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D1 5. ~~9~~. A communications cable comprising:
a cable jacket;
a spacer extending within the cable jacket, the spacer having a longitudinally extending center portion and plurality of longitudinally extending
5 wall portions radiating from the center portion, the longitudinally extending wall portions decreasing in thickness over only a portion thereof from the center portion to the cable jacket, the spacer and the cable jacket defining a plurality of compartments within the cable jacket; and
a twisted pair of insulated conductors disposed in one of the plurality of
10 compartments.

6. ~~10~~. The communications cable according to Claim ⁵/~~9~~ further comprising a plurality of twisted pairs of insulated conductors disposed in respective ones of the plurality of compartments.

7. ~~11~~. The communications cable according to Claim ⁶/~~10~~ wherein each of the plurality of twisted pairs of insulated conductors has a different lay length.

8. ~~12~~. The communications cable according to Claim ~~7~~⁹ wherein the plurality of longitudinally extending wall portions are configured so as to define a plurality of compartments of a helical configuration within the cable jacket and the plurality of twisted pairs of insulated conductors located within the plurality of
5 compartments extend helically about the longitudinal axis of the cable.

13. A communications cable comprising:
a cable jacket;
a spacer extending within said cable jacket, the spacer having a longitudinally extending center portion and plurality of longitudinally extending
5 wall portions radiating from said center portion, the longitudinally extending wall portions having a first radial section that increases in thickness with distance from the center portion and a second radial section that decreases in thickness with distance from the center portion, the spacer and the cable jacket defining a plurality of compartments within the cable jacket; and
10 a twisted pair of insulated conductors disposed in at least one of the compartments.

10. ~~14~~. The communications cable according to Claim ~~9~~⁹ wherein the first radial section is located between the center portion and the second radial section.

11. ~~15~~. The communications cable according to Claim ~~9~~⁹ wherein the second radial section is located between the center portion and the first radial section.

12. ~~16~~. The communications cable according to Claim ~~9~~⁹ wherein the first radial section and the second radial section are configured such that the plurality of longitudinally extending wall portions have a convex shaped cross-section.

13. ~~17~~. The communications cable according to Claim ~~12~~¹² wherein the convex shaped cross-section is arcuate.

14. ~~18~~. The communications cable according to Claim ~~12~~¹² wherein the convex shaped cross-section comprises a plurality of faces.

15.16. The communications cable according to Claim 9/13 wherein the first radial section and the second radial section are configured such that the plurality of longitudinally extending wall portions have a concave shaped cross-section.

16.20. The communications cable according to Claim 15/16 wherein the concave shaped cross-section is arcuate.

17.21. The communications cable according to Claim 15/16 wherein the concave shaped cross-section comprises a plurality of faces.

18.22. The communications cable according to Claim 9/13 wherein the first radial section and second radial section are configured such that the plurality of longitudinally extending wall portions have a recessed portion.

19.23. The communications cable according to Claim 9/13 wherein the first radial section and second radial section are configured such that the plurality of longitudinally extending wall portions have a ribbed portion.

20.24. The communications cable according to Claim 9/13 wherein the first radial section and the second radial section are configured such that the plurality of longitudinally extending wall portions have a sawtooth shaped cross-section.

25. A communications cable comprising:

a cable jacket;

a spacer extending within said cable jacket, the spacer having a longitudinally extending center portion and plurality of longitudinally extending wall portions radiating from said center portion, the longitudinally extending wall portions including a first section having a first thickness, a second section having a second thickness and a third section having a third thickness, the third thickness being different from the first and second thickness, the third section located between the first section and the second section, the spacer and the cable jacket defining a plurality of compartments within the cable jacket; and

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a twisted pair of insulated conductors disposed in at least one of the compartments.

22²¹/₂₆. The communications cable of Claim ²¹25 wherein the first, second and third thickness are different from one another.

23²¹/₂₇. The communications cable of Claim ²¹25 wherein the first thickness and the second thickness are the same and the third thickness is different from the first thickness.

24²³/₂₈. The communications cable of Claim ²³27 wherein the third thickness is greater than the first thickness.

25²³/₂₉. The communications cable of Claim ²³27 wherein the third thickness is less than the first thickness.

30. A communications cable comprising:
a cable jacket;
a spacer extending within said cable jacket, the spacer having a longitudinally extending center portion and plurality of longitudinally extending wall portions radiating from said center portion, the longitudinally extending wall portions having a sawtooth shaped cross-section including a plurality of teeth, each tooth having a tooth height and a tooth spacing, the spacer and the cable jacket defining a plurality of compartments within the cable jacket; and

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10 a twisted pair of insulated conductors disposed in at least one of the compartments.

31. The communications cable according to Claim 30 wherein each tooth height is the same.

32. The communications cable according to Claim 30 wherein at least two tooth heights are different.

33. The communications cable according to Claim 30 wherein each tooth spacing is the same.

34. The communications cable according to Claim 30 wherein at least two tooth spacings are different.

35. The communications cable according to Claim 30 wherein at least two tooth heights are different and at least two tooth spacings are different.

36. A communications cable comprising:

a cable jacket;

a spacer extending within said cable jacket, the spacer having a longitudinally extending center portion and plurality of longitudinally extending wall portions radiating from said center portion, the longitudinally extending wall portions including a knob shaped cross-section, the spacer and the cable jacket defining a plurality of compartments within the cable jacket; and

a twisted pair of insulated conductors disposed in at least one of the compartments.

37. The communications cable according to Claim 36 wherein the knob shaped cross-section is a half knob.

38. The communications cable according to Claim 36 wherein the knob shaped cross-section is a whole knob.

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38. The communications cable according to Claim 36 wherein the longitudinally extending wall portions includes a plurality of knob shaped cross-sections.

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40. A communications cable comprising:

a cable jacket;

a spacer extending within said cable jacket, the spacer having a longitudinally extending center portion and plurality of longitudinally extending wall portions radiating from said center portion, the longitudinally extending wall

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Concave portions having a convex shaped cross-section, the spacer and the cable jacket defining a plurality of compartments within the cable jacket; and
a twisted pair of insulated conductors disposed in at least one of the compartments.

27.41. The communication cable of Claim *26* ~~40~~ wherein the convex shaped cross-section is arcuate.

28.42. The communications cable of Claim *26* ~~40~~ where the convex shaped cross-section comprises a plurality of faces.

43. A communications cable comprising:
a cable jacket;
a spacer extending within said cable jacket, the spacer having a longitudinally extending center portion and plurality of longitudinally extending wall portions radiating from said center portion, the longitudinally extending wall portions having a concave shaped cross-section, the spacer and the cable jacket defining a plurality of compartments within the cable jacket; and
a twisted pair of insulated conductors disposed in at least one of the compartments.

44. The communication cable of Claim 43 wherein the concave shaped cross-section is arcuate.

45. The communications cable of Claim 43 where the concave shaped cross-section comprises a plurality of faces.